# A RESOLUTION

authorizing an agreement with URS Corporation for professional engineering services for construction of street improvements on Providence Road, from Stadium Boulevard to Stewart Road.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF COLUMBIA, MISSOURI, AS FOLLOWS:

SECTION 1. The City Manager is hereby authorized to execute an agreement with URS Corporation for professional engineering services for construction of street improvements on Providence Road, from Stadium Boulevard to Stewart Road. The form and content of the agreement shall be substantially as set forth in "Exhibit A" attached hereto and made a part hereof as fully as if set forth herein verbatim.

ADOPTED this \_\_\_\_\_ day of \_\_\_\_\_, 2013.

ATTEST:

City Clerk

Mayor and Presiding Officer

APPROVED AS TO FORM:

City Counselor

# SPONSOR: City of Columbia, Missouri LOCATION: Providence Road (Missouri State Route 163) PROJECT: STP-2101 (506)

*THIS CONTRACT* is between the City of Columbia, Missouri, hereinafter referred to as the "Local Agency", and URS Corporation, 1001 Highlands Plaza Drive West, Suite 300, St. Louis, Mo 63110, hereinafter referred to as the "Engineer".

INASMUCH as funds have been made available by the Federal Highway Administration through its Surface Transportation Program (STP), coordinated through the Missouri Department of Transportation, the Local Agency intends to improve Providence Road from Stadium Boulevard to just south of Stewart Road including lengthening the right turn lane at Stadium and new traffic signals at Burnam and Turner and requires professional engineering services. The Engineer will provide the Local Agency with professional services hereinafter detailed for the planning, design and construction inspection of the desired improvements and the Local Agency will pay the Engineer as provided in this contract. It is mutually agreed as follows:

# ARTICLE I – <u>SCOPE OF SERVICES</u> See Attachment A.

# ARTICLE II - DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS:

- A DBE Goal: The following DBE goal has been established for this Agreement. The dollar value of services and related equipment, supplies, and materials used in furtherance thereof which is credited toward this goal will be based on the amount actually paid to DBE firms. The goal for the percentage of services to be awarded to DBE firms is 10% of the total Agreement dollar value.
- B. DBE Participation Obtained by Engineer: The Engineer has obtained DBE participation, and agrees to use DBE firms to complete 17.9% of the total services to be performed under this Agreement, by dollar value. The DBE firms which the Engineer shall use, and the type and dollar value of the services each DBE will perform, is as follows

DBE FIRM NAME, STREET AND COMPLETE MAILING <u>ADDRESS</u>	TYPE OF DBE <u>SERVICE</u>	TOTAL \$ VALUE OF THE DBE <u>SUBCONTRACT</u>	CONTRACT \$ AMOUNT TO APPLY TO TOTAL <u>DBE GOAL</u>	PERCENTAGE OF SUBCONTRACT DOLLAR VALUE APPLICABLE TO <u>TOTAL GOAL</u>
Trekk Design Group, LLC 1441 East 104th St. Suite 105 Kansas City, MO 64131	Field surveys and ROW exhibit preparation	\$67,448	\$67,448	100%

# **ARTICLE III-ADDITIONAL SERVICES**

The Local Agency reserves the right to request additional work, and changed or unforeseen conditions may require changes and work beyond the scope of this contract. In this event, a supplement to this agreement shall be executed and submitted for the approval of MoDOT prior to performing the additional or changed work or incurring any additional cost thereof. Any change in compensation will be covered in the supplement.

# ARTICLE IV - RESPONSIBILITIES OF LOCAL AGENCY

The Local Agency will cooperate fully with the Engineer in the development of the project, including the following:

- A. make available all information pertaining to the project which may be in the possession of the Local Agency;
- B. provide the Engineer with the Local Agency's requirements for the project;
- C. make provisions for the Engineer to enter upon property at the project site for the performance of his duties;
- D. examine all studies and layouts developed by the Engineer, obtain reviews by MoDOT, and render decisions thereon in a prompt manner so as not to delay the Engineer;
- E. designate a Local Agency's employee to act as Local Agency's Person in Responsible Charge under this contract, such person shall have authority to transmit instructions, interpret the Local Agency's policies and render decisions with respect to matters covered by this agreement (see EPG 136.3);
- F. perform appraisals and appraisal review, negotiate with property owners and otherwise provide all services in connection with acquiring all right-of-way needed to construct this project.

# **ARTICLE V - PERIOD OF SERVICE**

The Engineer will commence work within two weeks after receiving notice to proceed from the Local Agency. The general phases of work will be completed in accordance with the following schedule:

- A. PS&E Approval by MODOT shall be completed on June 26, 2015. This schedule assumes a MoDOT 3 week review of key submittals and a period of one year for right-of-way acquisition
- B. Services during construction and the before and after traffic study shall be completed 90 days after construction final completion schedule.

The Local Agency will grant time extensions for delays due to unforeseeable causes beyond the control of and without fault or negligence of the Engineer. Requests for extensions of time shall be made in writing by the Engineer, before that phase of work is scheduled to be completed, stating fully the events giving rise to the request and justification for the time extension requested.

# ARTICLE VI – STANDARDS

The Engineer shall be responsible for working with the Local Agency in determining the appropriate design parameters and construction specifications for the project using applicable standards of professional care and good engineering judgment based on the specific site conditions, Local Agency needs, and guidance provided in the most current version of EPG 136 LPA Policy. If the project is on the state highway system or is a bridge project, then the latest version of MoDOT's Engineering Policy Guide (EPG) and Missouri Standard Specifications for Highway Construction shall be used (see EPG 136.7). The project plans must also be in compliance with the latest ADA (Americans with Disabilities Act) Regulations.

# **ARTICLE VII - COMPENSATION**

For services provided under this contract, the Local Agency will compensate the Engineer as follows:

- A. For design services, including work through the construction contract award stage, services during construction and the before and after traffic study (per Attachment B) the Local Agency will pay the Engineer the actual costs incurred plus a predetermined fixed fee of \$22,274, with a ceiling established for said design services in the amount of \$376,300 which amount shall not be exceeded.
- B. The compensation outlined above has been derived from estimates of cost which are detailed in Attachment B. Any major changes in work, extra work, exceeding of the contract ceiling, or change in the predetermined fixed fee will require a supplement to this contract, as covered in Article III - ADDITIONAL SERVICES.
- C. Actual costs in Section A above are defined as:
  - 1. Actual payroll salaries paid to employees for time that they are productively engaged in work covered by this contract, plus
  - 2. An amount estimated at 118.248% of actual salaries in Item 1 above for payroll additives, including payroll taxes, holiday and vacation pay, sick leave pay, insurance benefits, retirement and incentive pay, and for general administrative overhead, based on the Engineer's system for allocating indirect costs in accordance with sound accounting principles and business practice, plus
  - 3. An amount estimated at 0.268% of actual salaries in Item 1 above for facilities capital cost of money, plus

- 4. Other costs directly attributable to the project but not included in the above overhead, such as vehicle mileage, meals and lodging, printing, surveying expendables, and computer time, plus
- 5. Project costs incurred by others on a subcontract basis, said costs to be passed through the Engineer on the basis of reasonable and actual cost as invoiced by the subcontractors.
- D. The rates shown for additives and overhead in Sections VII. D.2 and VII. D.3 above are approximate and will be used for interim billing purposes. Final payment will be based on the actual rates experienced during the period of performance, as indicated by the Engineer's accounting records, and as determined by final audit of the Engineer's records by MoDOT.
- E. The payment of costs under this contract will be limited to costs which are allowable under 23 CFR 172 and 48 CFR 31.
- F. METHOD OF PAYMENT - Partial payments for work satisfactorily completed will be made to the Engineer upon receipt of itemized invoices by the Local Agency. Invoices will be submitted no more frequently than once every two weeks and must be submitted monthly for invoices greater than \$10,000. A pro-rated portion of the fixed fee will be paid with each Upon receipt of the invoice and progress report, the Local Agency will, as invoice. soon as practical, but not later than 45 days from receipt, pay the Engineer for the services rendered, including the proportion of the fixed fee earned as reflected by the estimate of the portion of the services completed as shown by the progress report, less partial payments previously made. A late payment charge of one and one half percent (1.5%) per month shall be assessed for those invoiced amount not paid, through no fault of the Engineer, within 45 days after the Local Agency's receipt of the Engineer's invoice. The Local Agency will not be liable for the late payment charge on any invoice which requests payment for costs which exceed the proportion of the maximum amount payable earned as reflected by the estimate of the portion of the services completed, as shown by the progress report. The payment, other than the fixed fee, will be subject to final audit of actual expenses during the period of the Agreement.
- G. **PROPERTY ACCOUNTABILITY** If it becomes necessary to acquire any specialized equipment for the performance of this contract, appropriate credit will be given for any residual value of said equipment after completion of usage of the equipment.

## **ARTICLE VIII - COVENANT AGAINST CONTINGENT FEES**

The Engineer warrants that he has not employed or retained any company or person, other than a bona fide employee working for the Engineer, to solicit or secure this agreement, and that he has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty, the Local Agency shall

have the right to annul this agreement without liability, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee, plus reasonable attorney's fees.

# **ARTICLE IX - SUBLETTING, ASSIGNMENT OR TRANSFER**

No portion of the work covered by this contract, except as provided herein, shall be sublet or transferred without the written consent of the Local Agency. The subletting of the work shall in no way relieve the Engineer of his primary responsibility for the quality and performance of the work. It is the intention of the Engineer to engage subcontractors for the purposes of: Surveys (ROW and topographic) and acquisition document preparation; Community Outreach and Traffic Data Collection and Analysis.

Sub-Consultant Name	Address	Services
Trekk Design Group LLC	1441 East 104th Street Suite 105 Kansas City, MO 64131	Surveys (topographic and ROW) and acquisition documents
Momentum Public Strategies	PO Box 1775 Columbia, MO 65205	Community Outreach
Crawford Bunte Brammeier (CBB)	1830 Craig Park Court Suite 209 PO Box 28727 St. Louis, MO 63146	Traffic analysis, data collection and signal design

## **ARTICLE X - PROFESSIONAL ENDORSEMENT**

All plans, specifications and other documents shall be endorsed by the Engineer and shall reflect the name and seal of the Professional Engineer endorsing the work. By signing and sealing the PS&E submittals the Engineer of Record will be representing to MoDOT that the design is meeting the intent of the federal aid programs.

# **ARTICLE XI - RETENTION OF RECORDS**

The Engineer shall maintain all records, survey notes, design documents, cost and accounting records, construction records and other records pertaining to this contract and to the project covered by this contract, for a period of not less than three years following final payment by FHWA. Said records shall be made available for inspection by authorized representatives of the Local Agency, MoDOT or the federal government during regular working hours at the Engineer's place of business.

## **ARTICLE XII - OWNERSHIP OF DOCUMENTS**

Plans, tracings, maps and specifications prepared under this contract shall be delivered to and become the property of the Local Agency upon termination or completion of work. Basic survey notes, design computations and other data prepared under this contract shall be made available to the Local Agency upon request. All such information produced under this contract shall be available for use by the Local Agency without restriction or limitation on its use. If the Local Agency incorporates any portion of the work into a project other than that for which it was performed, the Local Agency shall save the Engineer harmless from any claims and liabilities resulting from such use.

## **ARTICLE XIII – SUSPENSION OR TERMINATION OF AGREEMENT**

- A. The Local Agency may, without being in breach hereof, suspend or terminate the Engineer's services under this Agreement, or any part of them, for cause or for the convenience of the Local Agency, upon giving to the Engineer at least fifteen (15) days' prior written notice of the effective date thereof. The Engineer shall not accelerate performance of services during the fifteen (15) day period without the express written request of the Local Agency.
- B. Should the Agreement be suspended or terminated for the convenience of the Local Agency, the Local Agency will pay to the Engineer its costs as set forth in Attachment B including actual hours expended prior to such suspension or termination and direct costs as defined in this Agreement for services performed by the Engineer, a proportional amount of the fixed fee based upon an estimated percentage of Agreement completion, plus reasonable costs incurred by the Engineer in suspending or terminating the services. The payment will make no other allowances for damages or anticipated fees or profits. In the event of a suspension of the services, the Engineer's compensation and schedule for performance of services hereunder shall be equitably adjusted upon resumption of performance of the services.
- C. The Engineer shall remain liable to the Local Agency for any claims or damages occasioned by any failure, default, or negligent errors and/or omission in carrying out the provisions of this Agreement during its life, including those giving rise to a termination for nonperformance or breach by Engineer. This liability shall survive and shall not be waived, or estopped by final payment under this Agreement.
- D. The Engineer shall not be liable for any errors or omissions contained in deliverables which are incomplete as a result of a suspension or termination where the Engineer is deprived of the opportunity to complete the Engineer's services.
- E. Upon the occurrence of any of the following events, the Engineer may suspend performance hereunder by giving the Local Agency 30 days advance written notice and may continue such suspension until the condition is satisfactorily remedied by the Local Agency. In the event the condition is not remedied within 120 days of the Engineer's original notice, the Engineer may terminate this agreement.

- 1. Receipt of written notice from the Local Agency that funds are no longer available to continue performance.
- 2. The Local Agency's persistent failure to make payment to the Engineer in a timely manner.
- 3. Any material contract breach by the Local Agency.

# **ARTICLE XIV - DECISIONS UNDER THIS CONTRACT**

The Local Agency will determine the acceptability of work performed under this contract, and will decide all questions which may arise concerning the project. The Local Agency's decision shall be final and conclusive.

## **ARTICLE XV - SUCCESSORS AND ASSIGNS**

The Local Agency and the Engineer agree that this contract and all contracts entered into under the provisions of this contract shall be binding upon the parties hereto and their successors and assigns.

## ARTICLE XVI - COMPLIANCE WITH LAWS

The Engineer shall comply with all federal, state, and local laws, ordinances, and regulations applicable to the work, including Title VII of the Civil Rights Act of 1964 and non-discrimination clauses incorporated herein, and shall procure all licenses and permits necessary for the fulfillment of obligations under this contract.

## ARTICLE XVII - RESPONSIBILITY FOR CLAIMS AND LIABILITY

The Engineer agrees to save harmless the Local Agency, MoDOT and FHWA from all claims and liability to the extent due to Engineer's negligent acts or the negligent acts of his employees, agents or subcontractors. Neither Party shall be liable to the other Party for incidental, indirect, special or consequential damages.

## ARTICLE XVIII - NONDISCRIMINATION

The Engineer, with regard to the work performed by it after award and prior to completion of the contract work, will not discriminate on the ground of race, color or national origin in the selection and retention of subcontractors. The Engineer will comply with Title VII of the Civil Rights Act of 1964, as amended. More specifically, the Engineer will comply with the regulations of the Department of Transportation relative to nondiscrimination in federally assisted programs of the Department of Transportation, as contained in 49 CFR 21 through Appendix H and 23 CFR 710.405 which are herein incorporated by reference and made a part of this contract. In all solicitations either by competitive bidding or negotiation made by the Engineer for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or

supplier shall be notified by the Engineer's obligations under this contract and the regulations relative to non-discrimination on the ground of color, race or national origin.

# ARTICLE XIX – LOBBY CERTIFICATION

<u>CERTIFICATION ON LOBBYING</u>: Since federal funds are being used for this agreement, the Engineer's signature on this agreement constitutes the execution of all certifications on lobbying which are required by 49 C.F.R. Part 20 including Appendix A and B to Part 20. Engineer agrees to abide by all certification or disclosure requirements in 49 C.F.R. Part 20 which are incorporated herein by reference.

# ARTICLE XX – INSURANCE

- A. The Engineer shall maintain commercial general liability, automobile liability, and worker's compensation and employer's liability insurance in full force and effect to protect the Engineer from claims under Worker's Compensation Acts, claims for damages for personal injury or death, and for damages to property arising from the negligent acts, errors, or omissions of the Engineer and its employees, agents, and Subconsultants in the performance of the services covered by this Agreement, including, without limitation, risks insured against in commercial general liability policies.
- B. The Engineer shall also maintain professional liability insurance to protect the Engineer against the negligent acts, errors, or omissions of the Engineer and those for whom it is legally responsible, arising out of the performance of professional services under this Agreement.
- C. The Engineer's insurance coverage shall be for not less than the following limits of liability:
  - 1. Commercial General Liability: \$500,000 per person up to \$3,000,000 per occurrence;
  - 2. Automobile Liability: \$500,000 per person up to \$3,000,000 per occurrence;
  - 3. Worker's Compensation in accordance with the statutory limits; and Employer's Liability: \$1,000,000; and
  - 4. Professional ("Errors and Omissions") Liability: \$1,000,000, each claim and in the annual aggregate.
- D. The Engineer shall, upon request at any time, provide the Local Agency with certificates of insurance evidencing the Engineer's commercial general or professional liability ("Errors and Omissions") policies and evidencing that they and all other required insurance are in effect as to the services under this Agreement.
- E. Any insurance policy required as specified in (ARTICLE XX) shall be written by a company which is incorporated in the United States of America or is based in the United States of

America. Each insurance policy must be issued by a company authorized to issue such insurance in the State of Missouri.

# **ARTICLE XXI - ATTACHMENTS**

The following exhibits are attached hereto and are hereby made part of this contract:

Attachment A – Scope of Service	
Attachment B - Estimate of Cost	
Attachment C - Breakdown of Overhead Rates	
Attachment D - Certification Regarding Debarment, Suspension, and Othe Responsibility Matters - Primary Covered Transactions.	r
Attachment E - Certification Regarding Debarment, Suspension, and Othe Responsibility Matters - Lower Tier Covered Transactions.	
Attachment F – DBE Contract Provisions	

Attachment G – Fig. 136.4.15 Conflict of Interest Disclosure Form

Fig. 136.4.1 Contract

Revised 6/25/13

Executed by the Engineer this day of , 20.

Executed by the City this \_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_.

FOR: CITY OF COLUMBIA, MISSOURI

BY: \_

MIKE MATTHES, CITY MANAGER

FOR: URS CORPORATION BY: JENNIFER OBERTINO, VICE PRESIDENT AND OFFICE MANAGER usane Hestid ATTEST:

I hereby certify under Section 50.660 RSMo there is either: (1) a balance of funds, otherwise unencumbered, to the credit of the appropriation to which the obligation contained herein is chargeable, and a cash balance otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation contained herein; or (2) bonds or taxes have been authorized by vote of the people and there is a sufficient unencumbered amount of the bonds yet to be sold or of the taxes levied and yet to be collected to meet the obligation in case there is not a sufficient unencumbered cash balance in the treasury. Project Acct No. 440-8800-528.40-23, C00290.

JOHN BLATTEL, CITY OF COLUMBIA DIRECTOR OF FINANCE

APPROVED AS TO FORM:

NANCY THOMPSON, CITY COUNSELOR

Fig. 136.4.1 Contract

# Providence Road (Route 163) Improvements

# Scope of Services August 8, 2013

## **GENERAL DESCRIPTION:**

The agreement between URS and the City of Columbia, Missouri covers Engineering Services associated with the design of the proposed improvements to Providence Road (Route 163) from Stadium Boulevard to just south of Stewart Road. The general concept (lane configuration, widening and signal locations) will be Option VIIIA as approved by the Council on June 3, 2013. Street Improvements include installation of traffic signals at the intersection of Burnam Road and Providence Road and at Turner Avenue and Providence Road with lane additions on Providence Road and the construction of a southbound right turn lane on Providence Road from Stadium Boulevard to Brandon Road. The existing Providence Road pavement and storm sewer system will be utilized in place except for areas of widening. The existing signal at Rollins Street and Providence Road will be removed. The improvements include sidewalk along one side of Burnam Road from Providence Road to Birch Road and improvements to Birch Road from Burnam Road to Bingham Road.

This scope of services is based upon tasks associated with the Providence Road Improvements.

## **ENGINEERING SERVICES:**

- 1. Surveying Investigation
  - a. Review all as-built plans and GIS information provided by the City
  - b. Obtain title commitments
  - c. Surveying services as part of this Scope of Services include:
    - 1) Verify / establish horizontal and vertical control based on Missouri State Plane Coordinate System NAD 83, NAVD 88.
    - 2) Establish survey centerline that is tied to all property corners. Establish existing right-of-way boundaries for length of project.
    - Topo approximately 3,200 Linear Feet along the existing street corridor in areas necessary for improvements. This will include the edge of pavement in areas without proposed improvements. The topo will include the location of sanitary and storm water structures, power poles, telephone poles, sidewalks, streets, driveways, trees and other visible Improvements within the survey boundaries.

# URS

- 4) Prepare base map of existing parcels and right of way within the project boundaries based on field data and the Boone County GIS information.
- 5) Coordinate utility locates with Missouri One-Call.
- 6) Locate visible existing utilities and utilities located by Missouri One-Call. If utility locate companies are non-responsive then URS will attempt to contact each utility company and obtain utility maps and records.
- 2. Geotechnical Investigation
  - a. Perform 6 to 10 hand auger borings to a depth of 8 to 12 feet each. These borings will be located in the areas of proposed retaining walls. URS will send a geotechnical staff member to perform the field work. Soil samples will be collected. Laboratory tests will be performed on selected soil samples to determine the index properties of the subsurface soils.
  - b. Borings will be backfilled with cuttings. Some subsequent settlement of the backfill may result. Some disturbance of the ground surface and surrounding vegetation should be expected as a result of the field activities. Surveying of the boring locations is not included. Borings will be located with measuring tapes and existing landmarks.
  - c. Provide a letter report summarizing the results of the field investigation and laboratory testing program. Recommendations regarding earthwork, allowable bearing capacity, and lateral earth pressures for use in design will be provided.
- 3. Traffic Investigation
  - a. Obtain manual turning movement counts at the following intersections during morning, mid-day, and evening peak periods of a typical weekday for use during evaluation of any refinements to the proposed improvements and intersection geometric design:
    - i. Providence Road and Stewart Road
    - ii. Providence Road and Turner Avenue
    - iii. Providence Road and Rollins Street
    - iv. Providence Road and Burnam Road
    - v. Providence Road and Bingham Road
    - vi. Providence Road and Kentucky Boulevard
    - vii. Providence Road and Brandon Road
    - viii. Providence Road and Stadium Boulevard
    - ix. Bingham Road and Birch Road
    - x. Burnam Road and Birch Road
    - xi. Turner Avenue and Fifth Street
  - b. Obtain signal timing plans from MoDOT

- 4. Conceptual Design Plan
  - a. Project Conceptual Plan shall include:
    - 1) Strip map showing proposed improvements, including:
      - 1. Plan View
      - 2. Typical Section
      - 3. Cross sections limited to areas of potential walls and drainage issues
      - 2) Alternatives traffic analysis to optimize design
        - 1. Review and modify MoDOT's Synchro model, provided by the City, for morning, mid-day and evening peak hour counts
        - 2. Evaluate up to two alternative geometrics for each intersection
      - Analysis of possible improvements to Turner (eastbound left turn) and 5<sup>th</sup> (southbound right turn) turn lanes
  - b. Meetings/Deliverables
    - 1) Submit one copy of strip map to the City for review and comment
    - 2) Attend one meeting with City to discuss strip map and perform a field check
- 5. Public Involvement
  - a. Provide up to four project updates throughout the duration of the project to keep stakeholders informed as the project progresses
  - b. Attend up to 8 individual meetings with stakeholders on 8 separate days
- 6. Preliminary Design Plans
  - a. The Preliminary Design Plans shall include:
    - Proposed horizontal alignment with proposed grades. Horizontal alignment shall be drawn to a scale of proposed 1"=20' on plan (Scales are for standard full size drawings using a maximum print area of 22" x 34")
    - 2) Proposed typical sections
    - 3) Location and size of modified and proposed storm sewers and culverts.
    - 4) Location and length of proposed retaining walls. Includes one 300' long wall near Stadium (up to 6' height), one 150' long wall (up to 3.5' height), one 75' long wall (up to 3.5' height) and use of MoDOT standard 617.10H for any other walls.
      - 5) Intersection details
      - 6) Minor drainage improvements
      - 7) Stormwater management plan complying with City's current stormwater and water quality manual.
      - 8) Traffic signal plans at Turner and Burnam intersections with Providence
      - 9) Intersection striping and signing (based on Autoturn analysis)
      - 10) Removal of signals at Rollins intersection with Providence
      - 11) Retaining wall profiles
      - 12) Approximate earthwork computations
      - 13) Preliminary Cross Sections: Cross sections will be provided every 50 feet and half sections at every driveway and side street.
      - 14) Approximate Right-of-Way and easement requirements

- 15) Location of all known utilities within the project limits
- 16) Preliminary engineer's opinion of probable construction cost
- b. Meetings/Deliverables
  - 1) Submit one full size (22" x 34") set and two half size (11" x 17") sets of preliminary design plans to the City for review and comment
  - 2) Attend one meeting with City to discuss preliminary plans and one meeting with utilities
  - 3) Submit preliminary design plans to MoDOT following approval from the City
- 7. Right-of-Way Plans
  - a. Right-of-way line work will be created for all properties. This will include all existing Right-of-way, and permanent and temporary easements.
  - b. Prepare all necessary property and taking descriptions and exhibits. URS will provide right-of-way plan sets showing the bearings and distances. It is estimated that 40 parcels will have new right-of-way, permanent or temporary easements. URS shall provide up to 40 property exhibits (one exhibit for each property showing any temporary easements, permanent easements and right-ofway).
  - c. The right-of-way plans will include cover sheet, typical sections, plan / profile sheets and cross sections.
  - d. Meetings/Deliverables
    - 1) Submit one full size (22" x 34") set and two half size (11" x 17") sets of right-of-way plans to the City for review and comment
    - 2) Attend one meeting with City to discuss right-of-way plans and one meeting with utilities
    - 3) Submit Right-of-Way plans to MoDOT following approval from the City
- 8. Final Construction Plans
  - a. Prepare a complete set of plans, specifications, and bid documents based on the approved preliminary plans and right-of-way plans for the project. An electronic copy of project files on compact disk will be provided to the City in Microstation format.
  - b. The final plans shall include:
    - Title sheet, with legend, index and location map showing limits and length of project, Federal project number, provision in lower right hand corner for date and signature of appropriate local officials, and engineer's seal.
    - 2) Summary of Quantities
    - 3) "B" sheets listing quantities per plan/profile sheet
    - 4) Typical sections
    - 5) Alignment Control Sheet which shall include reference ties, benchmarks, and table of alignment coordinates
    - 6) Plans shall be drawn on sheets with a printable area of 22" x 34" with horizontal scale 1" = 20'. Plan sheets shall be set up to allow to scale  $\frac{1}{2}$  size plans to be placed on 11" x 17" paper.

## Attachment A

# URS

- 7) Cross sections with horizontal and vertical scale 1" = 5'.
- 8) Storm sewer/culvert profiles.
  - 9) Retaining wall plan, profiles and structural design/details for walls included in Task 6.a.4.
  - 10) Traffic signal plan details
  - 11) Interconnect plan for the corridor to accommodate new signals and maintain existing fiber connections
  - 12) Intersection geometric details with warping diagrams
  - 13) Modifications to existing street lighting at intersections.
  - 14) Maintenance of traffic (during construction) plan including signing & details
  - 15) Pavement marking and permanent signing plans
  - 16) Standard drawing detail sheets
  - 17) Sediment and erosion control plans
  - 18) Water quality plans and details
  - 19) Parcel numbers as shown on the right-of-way plans
  - 20) Specifications necessary to accurately describe the method and materials for construction
- 21) Final Engineer's Opinion of Probable Cost
- c. Bidding Services
  - 1) URS will answer all bidders' questions and review shop drawings
  - 2) Attend one pre-bid meeting
- d. Meetings/Deliverables
  - 1) Submit one full size (22" x 34") set and two half size (11" x 17") sets of final construction plans to the City for review and comment
  - 2) Attend one final construction plan review meeting with City and others, including utilities.
  - 3) Submit PS&E to MoDOT following approval from the City

## SERVICES DURING CONSTRUCTION:

- a. Attend one pre-construction meeting
- b. Respond to questions or design issues during construction
- c. Review traffic signal and retaining wall shop drawing submittals

# URS

# ADDITIONAL SERVICES:

## Traffic Investigation

Before & After Study: Generate a report summarizing before and after traffic performance measures along Providence Road from north of Stewart Road to south of Stadium Boulevard

Obtain "after improvements" manual turning movement counts at the following intersections during morning, mid-day and evening peak periods of a typical weekday:

- i. Providence Road and Stewart Road
- ii. Providence Road and Turner Avenue
- iii. Providence Road and Rollins Street
- iv. Providence Road and Burnam Road
- v. Providence Road and Bingham Road
- vi. Providence Road and Kentucky Boulevard
- vii. Providence Road and Brandon Road
- viii. Providence Road and Stadium Boulevard
- ix. Bingham Road and Birch Road
- x. Burnam Road and Birch Road
- xi. Turner Avenue and Fifth Street
- c. Conduct before and after travel time runs along Providence Road
- d. Generate a before and after traffic conditions summary report

<u>Additional property exhibits</u> over the 40 included will be paid for at \$800/each which includes obtaining the title.

# URS

# ASSUMPTIONS AND QUALIFICATIONS:

- 1. URS will be responsible for submitting plans and reports necessary for MoDOT approval pre LPA procedures.
- 2. URS will not be responsible for any permitting costs.
- 3. The City will facilitate obtaining copies of plans or reports for other projects or studies in the area that are in progress or in planning stages which may have interface issues and require coordination with this project.
- 4. Construction staking and full time construction field observation and inspection are not included. These services can be added if requested by the City.
- 5. The project shall be designed, bid, and constructed in one phase and generally as one construction/bid document package. Any changes to this approach causing additional work for URS will be considered a basis for additional work.
- 6. Assumes no suspicion of contaminated or hazardous soils.
- 7. URS general design criteria shall be that as specified by the City.
- 8. The scope does not include the design of Turner and 5<sup>th</sup> turn lanes.
- 9. New street lighting will not be provided except at intersections.
- 10. URS will provide information to answer questions and provide sketches or drawings to clarify or change items that were not clearly presented in the original documents. This work will be considered incidental to the overall design. URS will also provide interpretations of the design drawings during the construction process if the intent of the drawings is not clear. If the City chooses to change the drawings based solely on preference or a contractor's request, an appropriate contract change order will be processed prior to the work.
- 11. No additional interested parties or public meetings are included in the scope.
- 12. Traffic signal timing and turn-on will be provided by MoDOT.
- 13. URS assumes that a Programmatic CE will be submitted by the City. The following permits are not included in the scope:
  - Section 106
  - Section 4(f)
  - Endangered Species
  - Farmland Protection
  - U.S. Army Corps of Engineers Section 401 / 404

#### ATTACHMENT B rev 9-10-2013

Providence Road

sk Description				Classification	Terb	Admin	Total	c	
	PIC	РМ	Senior Engr	Engineer	Tech	Admin			
Surveying, Geotechnical, Traffic Investigations and Project	el-Up	4				]	5	5	725.47
inveying coordination					4			5	725.47
ility Coordination		B	4				12	5	1,372.28
effic Coordination			8	29	22	2	61 16	5	1,625.76
Id Check Survey			8				16	ŝ	1,389.76
epere Project Execution Plan	4					12	20	\$	1.590.80
oject set-up		- 6	8	.4	4	4	38	5	3.793.44
am Meetings Subtotal Man-hours	16	32	28	33	42	28	177		16,080.55
Subjotal Fee		\$ 3,426.33	\$ 3,609,88	<u>2.379.54</u>	\$ 3,120.41	\$ <u>1,306.73</u>		3	10,080.02
Conceptual Design Plan				T	<u>в</u>		16	5	1,450.9
tablish horizontal elignment of improvements		<u> </u>		4	2		B	5	65 <u>1.1</u>
/pical Sections	·	2		6	12		20	5	1.538.3
nacal cross sections stablish retaining well locations		2		2			24	<u>s</u>	358.3 2,141.4
satisfies and statistic improvements (at Burnam, Turner and Stadium)	4	4		16			3	5	1,031.40
pordinate with traffic modeling	·	4	8	6			10	5	860.9
natysis of Fifth and Tyrper turn tanes	<u> </u>				12		17	5	1,287.0
hip Map Preparation	4	4			1. 4.		12	<u>s</u> _	1,284.8
eam meetings	8	8			<u> </u>		16	<u>s</u> .	1,975.3
A/QC	2	4			36		141		13,287.9
Subtotal Man-hours	18	39	8	38 \$ 2,740.19	\$ 2.823,23				13,287.9
Subtolal Fee	\$ 2,517.30	\$ 4,175.84	5 1,031.40	<u>6, 0, 13</u>					
: Preliminary Design Plans					2		-	5	384 5
over Sheet	4	8	12		12	·	30	<u>s</u>	3,854.6
ien shoets, Honzontaj Alignment	<u> </u>	1	1	1	1	·· ·	17	5	1,356.9
reinage and Storm sewer improvements		2	1	12	2 50	<u> </u>	160		20.474.9
eteining Wall Me		<u> </u>	130	18	+		28	\$	2,569.7
tersection Geometrics	4	<u> </u>	<u> </u>	16	4		20	5	1,450.9
lersection Warping		1		5	2		8	\$	616 2
formwater Management Plan		2		2			4	5	358 3 904.6
raffic Signal Plan Coordination	1	2	2				10	\$	664.2
emovel of Signals at Rollins				+	2	+	10		791.0
oproximate earthwork	·-	2		10	+·	+	11	\$	828.1
ross Sections ( 50' Interval)	<u> </u>	1	2	10	4		12	\$	1,328.5
pproximate Permanent and Temporary Easements		4	4			I	. a	s	943.9
Sity Coordington/Conflicts		2	8		8	L	18	<u>+</u> :	1,839.9
raffic Control Concept (Vehicles and Peds) ngineer's Esympto	2				8		16	5	1,730.0
A/QC	4	6					10	ŝ	1,975.3
(antipat)	88	8	105	76	95	0	420	5	43,657.3
Subtotal Man-hour	26 \$ 3,6 <u>36.11</u>	58 6,210.22	\$ 21,272.53			5		5	43,657.3
Subtotal Fe	3 3,636.11	<u> </u>						.,	
Right-of-Way Plans		1 1	T		2		3	s	255.6
over Sheet evinw Easement Areas / Acquisition Summary Sheet		2					33	15	2.882.2
OW Plans (Cover, typ, Plan/prof w metes and bounds, xsecs)	4	4	1	8	18	1	3	ŝ	364.9
teview Easements - Exhibits		1	2	· · · · · · · ·				5	608.5
1 (00						2	8		987.6
A/QC	2	<u>+</u>				2	в	5	
feetings	· · · · ·	4	3		22	2		3 5	5,810.3
Subtolal Man-hour	10	4				2	в	5	
Keetings Subtotal Man-hour Subtotal Fe	10	4 15 \$ 1,713,17			22 5 1,634.50	2	B 61	3 5	5,810.3 5,810.3
Subtolal Man-hour	10	4 15 \$ 1,713,17			22 \$ 1,634.50 4 8	2	в	\$ \$ \$ \$	5,810.3 5,810.3 404,3 1,022.4
seeings Subtolal Man-hour Subtolal Man-hour Subtolal Fe Soare Sheet Year Sheet	10	4 15 \$ 1,713,17 1 4			5 1,634.50	2	8 61 5 12 48	3 5 5 5 5 5	5,810.3 5,810.3 404.3 1,022.4 4,702.4
eedings Subtotal Man-hour Subtotal Fe Subtotal Fe Gara Sheet ummary of Quantities	10	4 15 \$ 1,713,17 1 4 8	\$ 386.77		\$ 1,634.50 4 8 24 40	2	8 61 5 12 48 72	3 5 5 5 5 5 5 5	5,810.3 5,810.3 404.3 1,022.4 4,702.4 5,922.5
keetrigs Subtotal Man-hour Subtotal Fer Over Sheet ywaal Sectons ummary of Quantijes B Sheets Sheets	10	4 15 \$ 1,713,17 1 4	\$ 386.77 16		\$ 1,634.50 4 24 40 12	2	8 61 5 12 48 72 14	5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.2 1,022.6 4,702.4 6,922.5 1,105.6
eesings Subtotal Man-hour Subtotal Fe Savel Sheel yareal Sheel minmary of Quantiles B' Sheets Socidnais Control Sheet	10	4 15 \$ 1,713,17 1 4 8 8	\$ 386.77		\$ 1,634.50 4 8 24 40 12 12	2	8 61 5 12 48 72 14 24	3 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404,2 1,022.6 4,702.4 6,922.5 1,105.6 2,307.5
seeings Subtotal Manchour : Final Plans Subtotal Fe Sysel Sectons ummary of Quantiles Brisets Sheets Sh	10	4 15 1 1,713,17 4 8 8 2	\$ 386.77 16 24 5 4		3         1,634.50           4         8           24         40           12         12           8         8	2	8         61           5         12           48         72           14         24           15         15	3 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.2 1,022.6 4,702.4 6,922.6 1,105.6 2,307.5 1,526.2
seeings Subtotal Man-hour Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Subtotal B Sheets Social as Control Sheet Junn Sheets Junn Sheets	10	4 15 1,713,17 1 4 8 8 2 0 4	\$ 386.77 16 24 6 4 249	\$ 576.88	3         1,634.50           4         8           24         40           12         12           8         100	2	8 61 5 12 48 72 14 24	3 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 1,022.6 4,702.4 6,922.5 1,105.6 2,307.5 1,576.5 39,531.3 4,623.1
seeings     Subtotal Man-hour Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Subtota Subtotal Subtota	10	4 15 1,713,17 1 4 8 8 2 6 4 4	5 386.77 16 24 5 4 249 12		3         1,634.50           4         8           24         40           12         12           8         8	2	8 61 12 48 72 14 24 15 349 52 28	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 1,022.6 4,702.4 6,922.6 1,105.6 2,307.6 39,531.7 39,531.7 2,645.4
seeings     Subtotal Man-hour Subtotal Fe Sovel Sheet Ummary of Quantiles      Sheet     Sh	4 10 \$ 1,396.50	4 15 1,713,17 1 4 8 8 2 0 4	\$ 386.77 16 24 6 4 249	5 576.88	1         1,634.50           4         8           24         40           12         12           12         12           100         24           16         40	2	8 61 12 48 72 14 15 349 52 28 88	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.1 1,022.4 4,702.4 6,922.5 1,105.6 2,307.5 1,556.5 39,531.4 4,620.1 2,645.4 7,071.2
seeings     Subtotal Man-hour     Subtotal Man-hour     Subtotal Fe     S	10	4 15 1,713,17 4 8 8 8 8 8 8 8 8 9 4 4 4 4	\$ 386.77 16 24 8 4 249 12 8	\$ 576.88	3         1,634.50           4         -           40         -           12         -           12         -           100         -           24         -	2	8 61 12 48 72 14 24 15 349 52 28	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,810,3 5,810,3 4,04,2 1,022,5 4,702,4 6,922,5 1,105,6 2,307,5 1,556,5 39,531,2 4,623,1 2,646,7 7,071,1 4,370,1
seeings     Subtotal Manchour Subtotal Fe Soval Sheet Unread Q Quantiles Unread Q Quantiles Unread Sectors	4 10 \$ 1,396.50	4 15 1713.17 1 4 8 8 8 6 4 4 4 4 8 8 8 8 8 8 8 8 8 8 8 8 8	\$ 386.77 16 24 8 4 249 12 8	5 576.88 	\$         1,634.50           4         8           24         40           12         12           12         12           100         24           40         24	<u>2</u> <u>5</u> 100.52	8         61           61         12           48         72           14         24           15         349           52         28           88         56	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.; 1,022.5 4,702.4 5,922.5 1,105.6 2,307.5 1,576.5 39,531.7 4,623.1 2,645.4 7,071. 4,370. 856
seeings     Subtotal Man-hour     Subtotal Man-hour     Subtotal Fe     Subtotal Fe     Subtotal Fe     Subtotal Fe     Subtotal Fe     Subtotal     Subtota	4 10 \$ 1,386.50	4 15 1,713.17 4 8 2 6 4 4 4 4 4 4 4 8 8 20	\$ 386.77 16 24 8 4 249 12 8	5 576.88	1         1,634.50           4         8           24         40           12         12           12         12           100         24           16         40	2	8 61 5 12 48 72 14 15 349 52 28 28 349 52 28 349 55 56	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,810.3 5,810.3 1,022.4 1,022.4 7,02.4 6,922.5 1,105.6 2,307.5 1,506.5 39,531.1 4,623.1 2,645.4 7,071.1 4,707.1 4,370. 8,584.4 2,34.1 4,234.1
seeings     Subtotal Manchour Subtotal Fe Soval Sheet Unread Q Quantiles Unread Q Quantiles Unread Sectors	10 5 1,386.50	4 15 1713.17 1 4 8 2 6 4 4 4 4 4 4 2 0 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1	\$ 386.77 16 24 8 4 249 12 8	5 576.88 	\$         1,634.50           4         8           24         40           12         12           12         12           100         24           40         24	<u>2</u> <u>5</u> 100.52	8         61           61         12           48         72           14         24           15         349           52         28           88         56	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 5,810.3 404.1 1,022.6 4,702.4 6,922.6 7,075.5 39,531.1 4,623.1 2,646.7 7,071.1 4,370. 858.1 4,370. 858.1 4,204.1 2,403.3 1,975.1
seeings     Subtotal Man-hour Subtotal Fe Subtotal Subtotal Fe Subtotal Subtotal Fe Subtotal Subtotal Subtotal Subtotal Fe Subtotal Subtotal Subtotal Subtotal Subtotal Fe Subtotal Subtotal Subtotal Subtotal Subtotal Fe Subtotal Subtotal Subtotal Subtotal Subtotal Subtotal Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Subtotal Subtotal Subtotal Fe S	4 10 1,398.50	4 15 1,713,17 4 8 2 6 4 4 4 4 8 2 2 6 5 20 12 6	\$ 386.77 16 24 8 4 249 12 8	5 576.88 	3         1,634.50           4         24           24         12           12         12           12         12           100         24           40         24           100         24           100         24           100         24           100         24           20         3		8 61 12 48 72 14 24 52 29 88 52 29 88 55 50 20 10 16 858	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,810.3 5,810.3 404.; 1,022.6 4,702.4 6,922.6 1,056.6 2,307.6 1,556.6 2,307.6 1,556.6 2,307.6 1,556.6 2,307.6 1,556.6 2,307.6 1,556.6 3,957.1 4,623.1 5,645.1 5,755.100.100.100.100.100.100.100.100.100.1
Subtotal Manchour     Subtotal Manchour     Subtotal Fe	10 5 1,386.50 4 4 8 8 8 20	4 175 4 1,713.17 4 8 2 6 4 4 4 4 4 4 4 4 4 20 112 6 101	\$ 386.77	5 578.88 12 12 12 24 19 	3         1,634.50           4         8           24         40           12         12           12         12           12         12           16         40           24         5           100         24           5         8           24         8           24         10           24         24           10         24           24         24           24         24           24         24           24         24           24         24           22         24		8 61 12 48 72 14 24 52 29 88 52 29 88 55 50 20 10 16 858	3 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.; 1,022.6 4,702.4 6,922.6 1,056.6 2,307.6 1,556.6 2,307.6 1,556.6 2,307.6 1,556.6 2,307.6 1,556.6 2,307.6 1,556.6 3,957.1 4,623.1 5,645.1 5,755.100.100.100.100.100.100.100.100.100.1
seeings     Subtotal Manchour     Subtotal Fe     Subtota	10 5 1,386.50 4 4 8 8 8 20	4 175 4 1,713.17 4 8 2 6 4 4 4 4 4 4 4 4 4 20 112 6 101	\$ 386.77 16 24 6 4 249 12 8 8 4 4 323	5 578.88 12 12 12 24 19 	3         1,634.50           4         8           24         40           12         12           12         12           12         12           16         40           24         5           100         24           5         8           24         8           24         10           24         24           10         24           24         24           24         24           24         24           24         24           24         24           22         24		8 61 5 12 49 72 14 15 349 56 28 56 56 50 20 16 8 58	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,810.3 5,810.3 404.; 1,022.6 4,702.4 6,922.6 1,105.6 2,307.5 1,105.6 2,307.5 1,105.6 2,307.5 1,105.6 2,307.5 1,105.6 2,307.5 1,105.6 2,307.5 1,105.6 2,307.5 1,105.6 2,307.5 1,05.6 2,507.5
Subtotal Manchour Subtotal Manchour Subtotal Fe Sovar Silvet Joyan Silvet Joyan Sector Sheets Sovar Silvet Sheets	10 5 1,386.50 4 4 8 8 8 20	4 15 1,713.17 4 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	\$ 386.77 16 24 6 4 249 12 8 8 4 4 323	5 576.88 5 5776.88 12 12 12 24 10 5 6,495.93 1	\$         1,634.50           4         6           24         6           40         12           12         12           5         100           24         10           24         12           5         100           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           30         21,774,54		8 61 72 74 72 14 72 72 14 72 72 72 72 72 72 72 72 72 72 72 72 72	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,810.3 5,810.3 404.2 1,022.6 4,702.4 5,022.6 1,05.6 2,307.5 1,536.5 39,531.3 4,623.1 2,645.7 7,071.1 4,370. 8,564 2,344.1 2,403.4 1,975.8 5,719.4 8,5,719.4 5,719.4 5,719.4
Subtotal Manchour Subtotal Manchour Subtotal Fe Subtotal Fe Sourd Street Joycel Stephona ummary of Quantiles Sheets S	4 10 5 1,398.50 4 4 8 8 8 20 4 3 2,757,00	4 175 1,713,17 4 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 8 8 20 112 5 10,814,30 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	\$ 386.77 16 24 6 4 249 12 8 8 4 4 323	5 578.88 12 12 12 24 19 	3         1,634.50           4         4           24		8 61 5 12 49 72 14 15 349 56 28 56 56 50 20 16 8 58	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,810.3 5,810.3 404.1 1,022.5 4,702.4 6,922.5 1,05.6 2,307.1 1,536.3 9,531.1 2,645.4 7,071.1 4,620.1 2,645.4 7,071.1 4,370.0 858.4 2,403.1 1,975.3 85,719.4,
Subtotal Man-hour Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Subtotal Fe Sheets	4 10 10 1,398.50 4 4 8 8 8 20 4 3,2,77,00 a	4 15 1,713.17 4 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9	\$         386,77           16         -           24         -           -         -      -         -	5 576.88 5 5776.88 12 12 12 24 10 5 6,495.93 1	\$         1,634.50           4         6           24         6           40         12           12         12           5         100           24         10           24         12           5         100           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           30         21,774,54		6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,810.3 5,810.3 404.1 1,022.5 4,702.4 6,922.5 1,105.6 2,307.4 1,578.5 39,531.3 4,623.1 5,719.1 5,566.2 2,775.1 5,775.1 5,775.1 5,775.1 5,775.1 5,775.1 5,575.1 5,775.1
Subtotal Manchour Subtotal Manchour Subtotal Fe Subtotal Fe Sovar Silvet Jovar Silvet Jovar Silvet Jovar Silvet Jovar Silvet Sheets	4 10 5 1,298,50 5 4 4 4 4 4 5 2,757,00 8 4 4	4 175 1,713,17 4 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 8 8 20 112 5 10,814,30 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	\$ 386.77 16 24 6 4 249 12 8 8 4 4 323	5 576.88 5 5776.88 12 12 12 24 10 5 6,495.93 1	3         1,634.50           4         4           24		6         6           61	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	5,810.3 5,810.3 4,702 4 4,702 4 4,702 4 6,922 1 1,058 2 307.5 1,558 2 307.5 1,558 2 307.5 1,558 2 30531 1 4,623 1 5,719 1 5,565 1 5,56
Subtotal Manhour     Subtotal Manhour     Subtotal Fe	4 1 1 1 1 1 1 1 1 1 1 1 1 1	4 175 1,713,17 4 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 5 8 8 20 112 5 10,814,30 8 8 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	\$         386,77           16         -           24         -           -         -      -         -	5 5776.88 12 12 12 36 24 16 5 6,499,93 19 19 19 19 19 19 19 19 19 19	3         1,634.50           4         4           24	2 5 100.52 	6         6           6         6           72         72           14         24           24         25           20         26           56         20           16         755           20         365           50         20           16         755\$           10         10           15         44           24         60           10         10	S           S	5,810.3 5,810.3 404.1 1,022.5 4,702.4 5,922.5 1,057.5 2,307.5 1,556.5 2,307.5 4,623.1 2,645.7 7,071.1 4,370. 855.7 19.7 5 3,566. 2,045.5 7,735. 1,975. 2,045.7 1,975. 3,566. 2,045.7 1,975. 3,566. 2,045.7 1,975. 3,566. 2,045.7 1,975. 3,566. 2,045.7 1,975. 3,566. 2,045.7 1,975. 3,566. 2,045.7 1,975.7 3,566. 2,045.7 1,975.7 3,566.7 2,045.7 1,975.7 3,566.7 2,045.7 1,975.7 3,566.7 2,045.7 1,975.7 3,566.7 2,045.7 1,975.7 3,566.7 2,045.7 1,975.7 3,566.7 2,045.7 3,755.7 3,566.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,755.7 3,757.7 3,757.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 4,707.7 5,71
seeings     Subtotal Manchour     Subtotal Manchour     Subtotal F     Subto	4 10 10 5 1298.50 5 5 20 5 20 5 20 5 20 5 20 5 20 5 20 5 20 5 20 5 20 5 20 5 20 5 5 5 5 5 5 5 5 5 5 5 5 5	4           15           1,713.47           1	s         386.77           16         -           24         -           24         -           12         -           4         -           3         41,642.59           -         -	5 576.85 5 5776.85 12 12 12 24 	3         1,634.50           4         4           40         12           12         12           12         12           12         12           13         10           24         10           24         10           10         24           10         24           10         24           10         16           10         16           16         16           24         24	2 5 100.52 4 4 5 201.03 5 201.03 6 	6         6           61	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.1 1,022.6 7,02 6,922.5 1,055.6 2,307.1 4,623.1 2,645.7 3,953.1 2,645.7 1,055.6 3,953.1 2,645.7 1,075.5 8,5719.2 8,5719.2 8,5719.2 8,5719.2 5,719.2
Subtotal Manhour     Subtotal Manhour     Subtotal Fe	4 10 5 5 1,396,50 	4           15           1,713.47           1	\$ 386.77 16 24 4 249 12 8 4 	5 576.85 5 5776.85 12 12 12 24 	3         1,634.50           4         4           40         12           12         12           12         12           12         12           13         10           24         10           24         10           10         24           10         24           10         24           10         16           10         16           16         16           24         24	2 5 100.52 4 4 5 201.03 5 201.03 6 	6         6           61	S           S	5,810.3 5,810.3 404.1 1,022.6 7,02 6,922.5 1,055.6 2,307.1 4,623.1 2,645.7 3,953.1 2,645.7 1,055.6 3,953.1 2,645.7 1,075.5 8,5719.2 8,5719.2 8,5719.2 8,5719.2 5,719.2
Subtotal Manhour     Subtotal Manhour     Subtotal Fe     Subtotal Manhour     Subtotal Fe     Subtotal Manhour     Subtotal Fe     Subtotal Manhour     Subtotal Fe     Subtotal Manhour     Subtotal Manhour     Subtotal Manhour     Subtotal Fe     Subtotal Manhour     Subtotal Fe     Subtotal Manhour     Subtotal Manhour     Subtotal Fe     Subtotal Manhour     Subtotal Manhour     Subtotal Manhour     Subtotal Manhour     Subtotal Fe     Subto	4 10 5 5 1,306,50 	4           15           1,713.47           4           8           9           2           0           4           8           4           4           4           4           8           101           5           10,814.30           8           8           4           8           9           10,814.30           8           9           30           3,354.62	s         386,77           16         -           24         -           -         -      -         -	5 5778 88 5 5778 88 12 12 12 24 	3         1,634.50           4         4           40         12           12         12           12         12           13         100           24         12           12         12           13         12           14         10           15         21,714.54           16         16           16         16           16         16           24         16           16         16	2 5 100.52 100.52 4 4 5 201.03 5 201.03 5 201.03 5 201.03	B         B           61         61           12         48           76         72           14         24           16         329           26         56           50         20           16         358           50         20           16         358           16         44           20         16           170         10           170         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.1 1,022.4 7,105.4 2,07.1 1,05.4 2,07.1 1,508.3 39,531.1 2,648.7 7,071.1 4,370. 85,719. 85,719. 85,719. 85,719. 85,719. 85,719. 5,715.1 2,976. 2,976.2 2,976.2 3,586.2 2,045.1 7,735.1 2,848.1 2,976.2 3,586.2 2,045.1 7,735.1 2,848.1 2,976.2 3,586.2 2,045.1 7,735.1 2,848.1 2,976.2 3,586.2 2,976.2 3,586.2 2,976.2 3,586.2 1,976.1 3,586.2 2,976.2 3,586.2 2,976.2 3,586.2 3,596.2 3,596.2 3,596.2 3,596.2 3,596.2 3,596.2 3,596.2 3,596.2 3,59
seetings     Subtotal Man-hour     Subtotal Fe     Subtotal Man-hour     Subtotal Man-h	4 10 5 5 1,306,50 	4           15           1,713.47           1	s         386.77           16         -           24         -           24         -           12         -           4         -           3         41,642.59           -         -	5 576.85 5 5776.85 12 12 12 24 	3         1,634.50           4         4           40         12           12         12           12         12           12         12           13         10           24         10           24         10           10         24           10         24           10         24           10         16           10         16           16         16           24         24	2 5 100.52 4 4 5 201.03 5 201.03 5 502.58 42	6         6           61	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.1 1,022.4 7,105.4 2,07.1 1,05.4 2,07.1 1,508.3 39,531.1 2,648.7 7,071.1 4,370. 85,719. 85,719. 85,719. 85,719. 85,719. 85,719. 5,715.1 2,976. 2,976.2 2,976.2 3,586.2 2,045.1 7,735.1 2,848.1 2,976.2 3,586.2 2,045.1 7,735.1 2,848.1 2,976.2 3,586.2 2,045.1 7,735.1 2,848.1 2,976.2 3,586.2 2,976.2 3,586.2 2,976.2 3,586.2 1,976.1 3,586.2 2,976.2 3,586.2 2,976.2 3,586.2 3,596.2 3,596.2 3,596.2 3,596.2 3,596.2 3,596.2 3,596.2 3,596.2 3,59
seeings     Subtotal Man-hour Subtotal Fe Subtotal Man-hou Subtotal Fe Su	4 10 10 10 10 10 10 10 10 10 10	4           15           1,713.47           4           8           9           2           0           4           8           4           4           4           4           8           101           5           10,814.30           8           8           4           8           9           10,814.30           8           9           30           3,354.62	s         386,77           16         -           24         -           -         -<	5 576 88 5 576 88 12 12 24 18 5 6,459,93 16 7 5 6,459,93 10 7 5 1,153,76 291 5 33	3         1,634.50           4         6           24         40           12         12           12         12           13         100           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           25         1,783.09           5         1,783.09           541         534	2 5 100.52 100.52 4 4 5 201.03 5 201.03 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           76         72           14         24           16         329           26         56           50         20           16         358           50         20           16         358           16         44           20         16           170         10           170         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.1 1,022.6 7,02 6,922.5 1,055.6 2,307.1 4,623.1 2,645.7 3,953.1 2,645.7 1,055.6 3,953.1 2,645.7 1,075.5 8,5719.2 8,5719.2 8,5719.2 8,5719.2 5,719.2
seeings     Subtotal Manchou     Subtotal Fe     Subtotal Manchou	4 10 10 5 138550 5 138550 4 4 	4           15           1,713,17           1	\$         386.77           16         -           24         -           -         -      -         -	5 576.88 5 577.88 12 12 12 24 	3         1,634.50           4         4           40         12           12         12           12         12           13         100           24         10           12         12           13         12           14         10           15         24           16         24           15         23,774.54           16         16           24         16           16         24           5         1,783.09           5         1,783.09	2 5 100.52 4 4 5 201.03 5 201.03 5 502.58 42	B         B           61         61           12         48           76         72           14         24           16         329           26         56           50         20           16         358           50         20           16         358           16         44           20         16           170         10           170         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 404.1 1,022.6 7,02 6,922.5 1,055.6 2,307.1 4,623.1 2,645.7 3,953.1 2,645.7 1,055.6 3,953.1 2,645.7 1,075.5 8,5719.2 8,5719.2 8,5719.2 8,5719.2 5,719.2
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4           15           1,713.17           4           8           2           6           4           8           2           6           4           4           6           4           6           12           5           101           5           10514.32           8           9           101           5           36           5           365452           546           546	s         386.77           10         24           6         4           249         12           8         4           233         5           4         4           5         7.735.47           507         557           523         529           529         529	5         576.88           12	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           76         72           14         24           16         329           26         56           50         20           16         358           50         20           16         358           16         44           20         16           170         10           170         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 610.2 5,810. 404: 1,022: 4,702. 5,810. 404: 1,022: 4,702. 5,922: 5,925
seeings     Subtotal Manchou     Subtotal Fe     Subtotal Manchou	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4           15           1,713.17           4           8           2           6           4           8           2           6           4           4           6           4           6           12           5           101           5           101           5           5           3.854.62           546	s         386.77           10         24           6         4           249         12           8         4	5 576 88 5 576 88 12 12 24 18 5 6,459,93 16 7 5 6,459,93 10 7 5 1,153,76 291 5 33	3         1,634.50           4         6           24         40           12         12           12         12           13         100           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           25         1,783.09           5         1,783.09           541         534	2 5 100.52 100.52 4 4 5 201.03 5 201.03 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           76         72           14         24           16         329           26         56           50         20           16         358           50         20           16         358           16         44           20         16           170         10           170         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 610.3 5,810.3 404.3 1022.4 7,102.4 7,102.5 8,922.4 1,105.6 8,922.4 1,105.6 8,922.4 1,105.6 1,207.4 1
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4           15           1,713.17           4           8           8           4           4           4           4           4           4           4           4           4           4           6           70           12           6           12           6           101           5           10514.32           5           3054.62           540           5107.07           530.194.54	\$         386,77           10         74           24         74           12         74           13         74           14         74           15         1,249           16         12           17         8           18         14           19         12           10         12           11         12           12         12           13         1,1642,59           14         14642,59           15         7,735,47           15         7,735,47           15         529           12         128,92           12         128,92           12         128,92           12         128,92           13         12,878,63	5         576.88           12	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           76         72           14         24           16         329           26         56           50         20           16         358           50         20           16         358           16         44           20         16           170         10           170         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,810.3 5,810.3 4,702 4 4,702 4 4,702 4 6,922 1 1,058 2 307.5 1,558 2 307.5 1,558 2 307.5 1,558 2 30531 1 4,623 1 5,719 1 5,565 1 5,56
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4           15           1,713.17           4           8           2           6           4           8           2           6           4           4           6           4           6           12           5           101           5           10514.32           8           9           101           5           36           5           365452           546           546	\$         386,77           10         74           24         74           12         74           13         74           14         74           15         1,249           16         12           17         8           18         14           19         12           10         12           11         12           12         12           13         1,1642,59           14         14642,59           15         7,735,47           15         7,735,47           15         529           12         128,92           12         128,92           12         128,92           12         128,92           13         12,878,63	5         576.88           12	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           76         72           14         24           16         329           26         56           50         20           16         358           50         20           16         358           16         44           20         16           170         10           170         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 git 0.2 5 git 0.2
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1,713.17 4 8 8 9 9 9 9 9 9 12 9 12 9 12 9 12 10 15 10 10 10 10 10 10 10 10 10 10	\$         386,77           10         74           24         74           12         74           12         74           12         74           12         74           13         74           14         74           15         1,1642,59           16         7,735,47           15         7,735,47           587         559           5128,92         \$75,678,65	5         576.88           12	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           76         72           14         24           16         329           26         56           50         20           16         358           50         20           16         358           16         44           20         16           170         10           170         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5 git 0.2 git
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1713.47 1713.47 1713.47 1714 1715 17	\$         386,77           10         74           24         74           12         74           12         74           12         74           12         74           13         74           14         74           15         1,1642,59           16         7,735,47           15         7,735,47           587         559           5128,92         \$75,678,65	5         576.88           12	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,010,000,000,000,000,000,000,000,000,00
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1,713.17 4 8 8 8 9 9 9 9 9 9 1,713.17 1 9 9 9 9 1,713.17 1 9 9 9 1,713.17 1,713.17 9 9 9 9 1,713.17 1,713.17 9 9 9 1,713.17 1,713.17 9 9 9 1,713.17 1,	s         386,77           10         24           6         4           249         12           8         4           4         4           5         7,735,47           5         7,735,47           5         529           \$129,92         \$75,678,45	5         576.88           12	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,010,03,000,000,000,000,000,000,000,000,
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1713.47 4 1713.47 4 4 4 4 4 4 4 4 4 4 4 4 4	s         386,77           16         -           24         -           24         -           12         -           12         -           3         41,642,59           -         -           -	5 5778 88 5 5778 88 12 12 12 24 24 16 5 6,499,93 15 6,499,93 15 15 16 15 16 15 16 15 16 15 16 19 15 16 19 15 16 19 10 10 10 10 10 10 10 10 10 10	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,010,35,010,55,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,0
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1713.47 4 1713.47 4 4 4 4 4 4 4 4 4 4 4 4 4	\$         386,77           10         24           6         4           249         12           8         4           4         4           5         7,735,47           5         7,735,47           5         529           \$129,92         \$75,678,45	5 5778 88 5 5778 88 12 12 12 24 24 16 5 6,499,93 15 6,499,93 15 15 16 15 16 15 16 15 16 15 16 19 15 16 19 15 16 19 10 10 10 10 10 10 10 10 10 10	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,010,03,000,000,000,000,000,000,000,000,
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1,713.17 4 8 8 8 9 9 9 9 9 9 12 9 12 9 12 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 10	s         386,77           16         -           24         -           24         -           12         -           12         -           3         41,642,59           -         -           -	5 5778 88 5 5778 88 12 12 12 24 24 16 5 6,499,93 15 6,499,93 15 15 16 15 16 15 16 15 16 15 16 19 15 16 19 15 16 19 10 10 10 10 10 10 10 10 10 10	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,010,3 5,010, 5,210
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1,713.17 4 8 8 9 9 9 9 9 12 10 14 9 9 12 10 14 9 9 12 10 14 9 9 12 10 14 9 9 12 10 14 9 9 12 12 12 12 12 12 12 12 12 12	s         386.77           10         24           6         4           249         12           8         4	5 5778 88 5 5778 88 12 12 12 24 24 16 5 6,499,93 15 6,499,93 15 15 16 15 16 15 16 15 16 15 16 19 15 16 19 15 16 19 10 10 10 10 10 10 10 10 10 10	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,010,35,010,55,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,50,00,0
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal     Subtot	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1,713.17 4 8 8 8 9 9 9 9 9 9 12 9 12 9 12 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 1 10 10	s         386.77           10         24           6         4           249         12           8         4	5 5778 88 5 5778 88 12 12 12 24 24 16 5 6,499,93 15 6,499,93 15 15 16 15 16 15 16 15 16 15 16 19 15 16 19 15 16 19 10 10 10 10 10 10 10 10 10 10	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	5,610.3 5,810. 5,810. 404,4 702. 404,4 702. 404,4 702. 404,4 702. 404,4 702. 404,4 702. 404,4 70
seeings     Subtotal Manchou     Subtotal Manchou     Subtotal F     Subtotal M     Subtotal     Subtotal M     Subtotal	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 19 1,713.17 4 8 9 9 9 9 9 9 9 9 10 10 10 10 10 10 10 10 10 10	s         386.77           16	5 5778 88 5 5778 88 12 12 12 24 24 16 5 6,499,93 15 6,499,93 15 15 16 15 16 15 16 15 16 15 16 19 15 16 19 15 16 19 10 10 10 10 10 10 10 10 10 10	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	S           S	5,010,3 5,010, 5,210
Eling Plans     Subtotal Manchou     Subtotal Fe     Subt	4 10 10 1,388.50 1,385.50 1,395.50 1,319	4 15 1,713.17 4 8 8 9 9 9 9 1,713.17 4 9 9 9 1,713.17 1 1,713.17 1,7	s         386,77           16         -           24         -           6         -           249         12           8         -           4         -           323         -           5         -           -         <	5 5778 88 5 5778 88 12 12 12 24 24 16 5 6,499,93 15 6,499,93 15 15 16 15 16 15 16 15 16 15 16 19 15 16 19 15 16 19 10 10 10 10 10 10 10 10 10 10	3         1,634.50           4         6           24         40           12         12           12         12           14         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           24         10           3         23,774.54           16         16           24         16           25         1,783.09           5         1,783.09           541         534           574.30         10	2 5 100.52 100.52 4 4 5 201.03 5 2 10 5 201.03 10 10 10 5 201.03 10 10 10 10 10 10 10 10 10 10	B         B           61         61           12         48           78         78           14         24           16         122           26         56           50         20           16         3558           50         20           16         3558           16         44           26         10           110         120           120         5	S           S	5,810.3 5,810. 5,810. 404, 402, 404, 4702. 404, 702. 404, 702. 404, 7071. 4370. 4527

COST PER ADDITIONAL PLAT\* \* Includes \$300 for title work \$ 800.00

## Providence Road-Additional Services

## URS

-

#### Man-hour Breakdown

				Classification					Cost
Fask Description		PM	Senior Engr	Engineer	Tech	Admin	Total		
	PIC		Senior crigi	Ligited		8	28	\$	2,674.6
Coordination of Before and After Traffic Study	4	16		0	0	8	28		
Total Man-hours	4	16	<u> </u>		·	·	<u> </u>		
				taa l	\$34	\$23	<u> </u>	1	
Hourly Fee (Raw)	\$64	\$49	\$59	\$33	\$74.30	\$50.26		-1	
MoDOT Audited Rate (Raw * 2.18516)	\$139.85	\$107.07	\$128.92	\$72.11	514.30	330.20		-	
					\$0.00	\$402.07	T	+	\$2,674.
Project Subtotal Fee	\$559.40	\$1,713.17	\$0.00	\$0.00	30.00	3402.07		+	
,									\$320.
		12% Profit							
									\$0.
		Trekk		· · · · · · · · · · · · · · · · · · ·					\$19,014.
		CBB					-	-	\$0.
		Momentum Publ							\$0.
		Printing/Display							\$0.
		Direct Expense	Costs						
								r—	
		TOTAL (Design	Phasel						\$22,0
		CINE (Design							

### Providence Road Retaining Walls - Hours Estimate

### ASSUMPTIONS:

Three waits will be required: Wall 1, 300' long, 5-6' max height; Wall 2, 150' long, curved, with surcharge, 3.5' max height, Wall 3, 75' long, curved, with surcharge, 3.5' max height

MoDOT Standard Permanent Concrete Traffic Barriers (617.10H) and/or similar standards will be used for walls 42 inches or less in height, with no live load within 6 feet. No structural design or plans will be completed for these walls

					Hours		
77		Estimated	Senior	Senior	Structural	CADD	TOTAL
Task	Description	Sheets	Reviewer	Structural	Engineer	Technician	HOURS
A	Preliminary Design						
1	Preliminary Design		0	16	32	0	48
2	TS&L or Pretiminary Drawings	6	0	20	36	48	104
3	Preliminary Cost Estimate		0	6	12	0	18
4	ITR	[	4 .	2	2	. 2	. 10
	Subtotal	6	4	44	82	50	180
В.	Final Design			ļ			
1	Retaining Wall Designs ( 3 Walls with 6 estimated design			1			
1	sections)		0	16	32	0 0	48
2	Retaining Wall Reinforcing Detailing		0	12	24	0	36
3	Plans			[			
	Title Sheet / Location Plan	1	0	1	2	6	9
	General Notes and Quantities	1	0	4	8	6	18
	Plan and Elevation Sheets	4	D .	6	12	4	22
	Reinforcing Elevation Sheets	8	0	14	28	48	90
	Typical Sections	2	0	6	12	16	34
	Details	1	0	. 4	8	12 4	24
	Reinforcing Bar Lists	. 1	ō	. 4	8		16
4	Special Provisions		6	12	0	0	18
5	Quantities and Cost Estimate		0	8	16	0	24
6	ITR	1	1	1	1	. 4	10
	Subtotal	18	10	88	151	100	349
Tota	il Hours		14	132	233	150	529
Lab	or Rates (\$/Hr )		\$64.00	\$59.00	\$59 00	\$34.00	Avg Rate \$52.04
Sub	total Labor Costs - Wall Design		\$896.00	\$7,788.00	\$13,747.00	\$5,100.00	\$27,531.0

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## Providence Road Retaining Walls - Hours Estimate

Task	Description	Senior Structural	Senior Structural	TOTAL
	Construction Services			
1	RFI's	4	8	
2	Shop Drawings	8	32 6	40
3	Meetings / Coordination / Admin	2	6	8
	······································			
Tota	al Hours	14	46	60
Lab	or Rates (\$/Hr.)	\$59.00	\$59.00	
	ototal Labor Costs - Wall Design	\$826.00	\$2,714.00	\$3,540.0

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t)(fu	Tolai Hr	Ka(#	Rew Labor sest	Greenpen	Vnits	Unit Prine	Total Price
IPM TM		58 15	485.52	Travel mee (Survey Vehicle)	480	0.50	2548 \$
SE	9	45.00				0.90	0.0
SPE	- Qi	39.27	D QD	Full Size Plats		1 00	10
Pt	0	ji≰ qo	0 50	Spec Boaks		55 90	40
ASE DI	3	29.07	0 D	Computer Time	3	6.05	0.0
TECH	0	20.18	0 00	Equipment Charge	128	7 50	544.0
ADAVA	8	30.14	20112	Survey Consumables	3	100 90	100 0
OPM, OD	•20	35 48	4 328 10	Thio Viant	01	200.00	12,009.0
18440	6	11.57			49	1 500 00	20 900 0
SC	126	4E 78				5000 00	0 0
Lia		2/ 00:	219 00	Traffic Court (Mor)	a	500.00	0.0
	260		3 11,538.14			تواه 7	113 134
	PM TM 3E 8PE PE - ASE D7 TECH - ADWA 0PM, 03	PAI         NI         NI           12L         .0         .0           3Pt         .0         .0           9Pc         .0         .0           100000         .8         .0           100000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00           10000         .00         .00	PA         S	PAI         M         S         S0 19         45.52           72L         0         44.500         P.00         S7         D.00           39'L         0         19'S 27         D.00         S7         D.00           9'PE         0         35:6.01         0.20         S7         D.00           24'E         0         29'S 7         D.00         S7         D.00           24'E         0         20'S 10'         0.20'S 10'S 10'S 10'S 10'S 10'S 10'S 10'S 1	PRI         I         65 07         Canal Name (5-covery vehicle)           75E         0         46.50         p.000 Harf Gas Poop.           89'L         0         75.00         p.000 Harf Gas Poop.           89'L         0         75.00         p.000 Harf Gas Poop.           9'E         0         35.60         0.200 Space Roots.           ASL 07         0         29.07         0.000 Space Roots.           1'EC+         0         16         6.000 Space Roots.           1'EC+         0         16         4.112 Space Comparameters.           1'EC+         0         16         4.112 Space Comparameters.           1'EC+         0         15.11         25.23 Space Roots.           1'EC+         0         15.11         25.23 Space Roots.           1'EC+         0         27.001         27.000	PRI         1         6         56 19         65 17         Tomel Twee (5-univer Universe)         600           75E         0         45.00         p.000 Hart Ros Ports         600           891         0         35.01         p.000 Hart Ros Ports         600           994         0         35.01         p.000 September Ross         600           995         0         35.01         p.000 September Ross         7           900 September Ross         0         30.14         p.000 September Ross         7           900 September Ross         30.14         p.000 September Ross         6           100 September Ross         6         7.157         p.23.23 September Ross         6           100 September Ross         1.27         25.23 September Ross         6         6 </td <td>PM         s.         56 14         465 27 Topel me 65-very vehicle;         680 0         9 36           12t         0         445 00         p.0.PHatf 656 Pots;         0.955         0.955           0Pt         0         19 27         p.0.0.PHatf 656 Pots;         0.955         0.955           0Pt         0         19 57         p.0.0.PHatf 556 Pots;         0.955         0.955           0Pt         0         19 57         p.0.0.PHat 556 Pots;         0.955         0.955           2Pt         0         15 6:0         0.0.0.0.955         0.955         0.955         0.955           2Pt         0         15 6:0         0.0.0.0.955         0.950         0.950         0.955</td>	PM         s.         56 14         465 27 Topel me 65-very vehicle;         680 0         9 36           12t         0         445 00         p.0.PHatf 656 Pots;         0.955         0.955           0Pt         0         19 27         p.0.0.PHatf 656 Pots;         0.955         0.955           0Pt         0         19 57         p.0.0.PHatf 556 Pots;         0.955         0.955           0Pt         0         19 57         p.0.0.PHat 556 Pots;         0.955         0.955           2Pt         0         15 6:0         0.0.0.0.955         0.955         0.955         0.955           2Pt         0         15 6:0         0.0.0.0.955         0.950         0.950         0.955

<sup>3</sup> hTL		Tasal Prise
Project Administration		\$2.977
PRELIMINARY DIKSIGN BUNVEY		133.571
ROW FLANS (40 ROW Exhibits \$502 each - Including Title Wark)		\$12 000
TREKK TRAFFIC COUNTS	<u>.</u>	50
TREKK TRAFFIC COUNTS (ARM)		10

#### MAN HOUR AND FEE ESTIMATE

																Qvart	940	162 430
SUB-CONSULTANT TREKK Providence Rea	ad Survey															Pre	fa .	12 00%
	····,															Number p	t Sheek	
Favx : No Description of Work Nemol/Casrs	PR. TM	SE	SFE	PE	45E DJ	TECH	ADMIN	SPM OS	SPC	SC	Ui .	TOTAL MAN HOURS	TOTAL MAN- DAYS	TOTAL RAW LABOR CCST (A)	OVERHEAD COS1 (B)	TOTAL LABOR PLUS OVERHEAD (A+B)	PROFIT	TOTAL _ABOR FEE (A+B+C)
• Project Administration				<u>.</u>	<u> </u>							16	2 00		1,140.15	1,854 79 0.00	222 57	
PRELIMINARY DESIGN SURVEY				+	<u> </u>							a	0.00	9.59	0.00	0.00	9.00	9 0
Verify/Establish Conner Tupoploatik: Servey + 1800 LF								413		16 54	8		) 00 :4 30	1 650 54		2 826 47	215 10 1,470 25	15 722 3
Usity Locates Estatush ROW								ei .		24 24		24 194	00 £ 00 C1		1 A7.3 29 4 395 53	2 845 45 10 608 55	353 45 1 272 79	
TREKK TRAFFIC COUNTS				÷	+								C 00	0.80	2.00	9.50	3.00	2
Traffic Counts (5 people) Traffic Counts (After project complete 5 proper)				•								3	0.00		0 57	() (X)	00 C	1
							,							by hour				
TOTAL MAN-HOURS AND LABOR FEE	6	20 100 0		1 0 00	0 0 0300 0	0	100	120	1 60	178: HE OD;	1,60	286	25.00	11 372 14 check h	18.390 22 y funte		3, 558, 76	23.364
IOTAL MANDAYS	1 (61.52	3	1	1	3	5	\$ 241.12	\$ 4.576.10	5 262 53	\$ 5,044.67 1	218.00	\$ 11 534 14	_	11,538 14	18.747 17	50.265 31	3 634 74	33,910
TUTAL LABOR COST AND FFF		<u></u>					••											53.528. 67.448
TOTAL LOR, OH, PET & EXPS				-i	<u> </u>		i			· ·						i		

## Providence Road Intersection Improvements - CBB Cost Estimate

				Work Hours				
	Classification: Billing Rate:		Sr. Eng. II \$ 45.50	Proj. Engr IV \$ 39.50	Designer \$       24.50	CAD Tech II \$ 23.50	Total Hours	Cost (\$)
TASK 1 - PROJECT COORDINATION								
Project Coordination Subtotal		0	24	0	0	0	<u>24</u> 24	
TASK 2 – TRAFFIC ANALYSIS								
2.1 Manual Intersection Counts (11 locations)			4			116	120	
2.2 Update Synchro Models			8	8				\$ 680.00
2.3 Evaluate up to two alternative concepts		L	16 28	16 24	0	116	<u> </u>	\$ 1,360.00 \$ 4,948.00
Subtotal		U	20	24	U	110	100 -	φ 4,840.00
TASK 3 – SIGNAL & LIGHTING DESIGN 3 1 Verify signing, striping, Autoturn		16		24			40	\$ 1,724.00
3.2 Traffic signal Plans and Lighting Modifications		80	40	160	80		360	
3 3 Interconnect Plan		16	<u> </u>	40	24			\$2,944.00
Subtotal		112	40	224	104	0	480	\$ 18,648.00
Direct Labor Costs		112	92	248	104	116	672	\$ 24,688.00
Dverhead (150%)								\$ 37,032.00
Fixed Fee (12%)								\$ 7,406.40
Total Labor Cost								\$ 69,126.40
				Direct Costs				
Mileage				·······				\$ 1,695.00 \$ 1,695.00
Total Direct Costs								\$ 1,695.00

TOTAL PROJECT COST

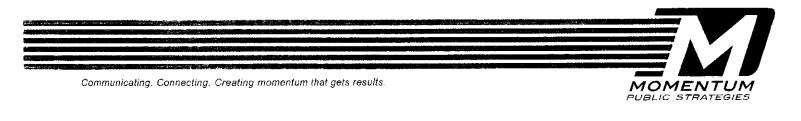
70,821.40

\$

## Providence Road Intersection Improvements - CBB Cost Estimate Additional Services

		 		Wor	k Hours						· · · · · ·
Classific Billing		Eng. IV 48.50	r. Eng. II 45.50	Proj. \$	Engr IV 39.50	esigner) 24.50	CA \$	D Tech II 23.50		Total Hours	Cost (\$)
TASK 4 – BEFORE/AFTER STUDY (ADDITIONAL SERVICES)		 	 			 					
<ol><li>4.1. Manual Intersection Counts Post Construction (11 locations)</li></ol>			 4					116		120	\$ 2,908 00
4.2 Before & After Travel Time Runs		 	16					48		64	\$ 1,856.00
4.3. Summary Report			 24		16					40	\$ 1,724.00
Subtotal	,	 0	44		16	0		164		224	\$ 6,488.00
Direct Labor Costs		0	44		16	0		164	0	224	\$ 6,488.00
Overhead (150%)											\$ 9,732.00
Fixed Fee (12%)											\$ 1,946.40
Total Labor Cost											\$ 18,166.40
		 	 	Dire	ct Costs	 					
Vileage		<u>.</u>	 								\$ 847.50
Total Direct Costs		 	 			 · ···					\$ 847 50
TOTAL PROJECT COST											\$ 19,013.90

TOTAL PROJECT COST



# Momentum Public Strategies Scope of Services and Fee Estimate for City of Columbia - Providence Road Project

Momentum Public Strategies will provide the following scope of services for the Providence Road project.

## Task 1: Project Newsletters/Updates

Momentum Public Strategies will work with the consultant team and the City to provide up to four project updates throughout the duration of the project at key project milestones to the public. Momentum Public Strategies shall be responsible for designing, developing content, getting input and edits from the team and produce the final project newsletter/update.

The project newsletter providing important project information and updates will be developed at four key points/milestones during the project. This will include key project updates, photos and other materials as determined by the project team.

The four project newsletters/updates will be developed and provided to the City for distribution through their various communication channels.

## Task 2: Project Team Meetings (either in person or via phone as necessary)

Momentum Public Strategies will participate in key project team meetings throughout the project.

## Fee estimate for scope of services outlined above:

\*Momentum Public Strategies hourly rate: \$150/hr.

Task	Hours	Hourly Rate	Fee by Task \$4,800	
Task 1: Develop four project newsletters/updates	32	\$150/hr.		
Task 2: Project Team Meetings	8	\$150/hr.	\$1,200	
TOTAL HRS/FEE	40		\$6,000	

P.O. BOX 1775 COLUMBIA, MO 65205

## WWW.MOMENTUMSTRATEGIES-LLC.COM

# ATTACHMENT C MODOT APPROVAL OF OVERHEAD RATES



Missouri Department of Transportation David B. Nichols, Director 105 West Capitol Avenue P.O. Box 270 Jefferson City, Missouri 65102

573.751.2551 Fax: 573 751.6555 1 888.ASK MODOT (275 6636)

August 19, 2013

Ms. Christy Willcourt URS Corporation 9400 Amberglen Blvd., Building C Austin, TX 78729

Dear Ms. Willcourt:

Thank you for submitting your company's annual financial pre-qualification documents. MoDOT's Audits and Investigations Division has completed the review. URS Corporation will be added to the Approved Consultant Pre-qualification List. To view this list, go to <u>www.modot.gov</u> scroll down the page to Consultant Services under the More Links – select Consultant Pre-qualification Requirements – select Approved Consultant Pre-qualification List.

When URS Corporation enters into a standard contract with MoDOT the overhead calculations for the home office rate of 118.248% and a field office rate of 98.024% and a facilities capital cost of money of 0.268% should be used until a revised financial prequalification rate is in effect. Please note this letter is not the result of a MoDOT audit or cognizant review.

All companies must submit the required pre-qualification information annually. Failure to comply may result in loss of MoDOT pre-qualification. Financial information should reflect the most recent complete fiscal year and must be submitted no later than six months after the close of that fiscal year. Please remember to review the expiration dates to ensure your company remains in approved status.

If you have any questions, please call (573) 751-7446.

Respectfully,

Tuen Y. Cara

Erica Y. Cage Senior Auditor Audits and Investigations

ce: Mary Ann Jacobs-de



Our mission is to provide a world-class transportation experience that delights our customers and promotes a prosperous Missouri. www.modot.org

## ATTACHMENT D

## CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS -PRIMARY COVERED TRANSACTIONS

### INSTRUCTIONS FOR CERTIFICATION

- 1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
- 2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
- 3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
- 4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
- 6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
- 7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transaction" provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded

from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to check the Nonprocurement List at the Excluded Parties List System.

https://www.epls.gov/epls/search.do?page=A&status=current&agency=69#A.

- 9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
- 10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

# Certification Regarding Debarment, Suspension, and Other Responsibility Matters -Primary Covered Transactions

- 1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
  - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
  - b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
  - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
  - d. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
- 2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## ATTACHMENT E

## CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION--LOWER TIER COVERED TRANSACTIONS

## INSTRUCTIONS FOR CERTIFICATION

- 1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
- 2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
- 3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
- 4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
- 5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
- 6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
- 7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List at the Excluded Parties List System.

https://www.epls.gov/epls/scarch.do?page=A&status=current&agency=69#A.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which normally possessed by a prudent person in the ordinary course of business dealings.

9. Except for transactions authorized under paragraph 5 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

## Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transactions

- 1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.
- 2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

## Attachment F Disadvantage Business Enterprise Contract Provisions

1. Policy: It is the policy of the U.S. Department of Transportation and the Local Agency that businesses owned by socially and economically disadvantaged individuals (DBE's) as defined in 49 C.F.R. Part 26 have the maximum opportunity to participate in the performance of contracts financed in whole or in part with federal funds. Thus, the requirements of 49 C.F.R. Part 26 and Section 1101(b) of the Transportation Equity Act for the 21st Century (TEA-21) apply to this Agreement.

2. <u>Obligation of the Engineer to DBE's</u>: The Engineer agrees to assure that DBEs have the maximum opportunity to participate in the performance of this Agreement and any subconsultant agreement financed in whole or in part with federal funds. In this regard the Engineer shall take all necessary and reasonable steps to assure that DBEs have the maximum opportunity to compete for and perform services. The Engineer shall not discriminate on the basis of race, color, religion, creed, disability, sex, age, or national origin in the performance of this Agreement or in the award of any subsequent subconsultant agreement.

3. <u>Geographic Area for Solicitation of DBEs</u>: The Engineer shall seek DBEs in the same geographic area in which the solicitation for other subconsultants is made. If the Engineer cannot meet the DBE goal using DBEs from that geographic area, the Engineer shall, as a part of the effort to meet the goal, expand the search to a reasonably wider geographic area.

4. <u>Determination of Participation Toward Meeting the DBE Goal</u>: DBE participation shall be counted toward meeting the goal as follows:

A. Once a firm is determined to be a certified DBE, the total dollar value of the subconsultant agreement awarded to that DBE is counted toward the DBE goal set forth above.

B. The Engineer may count toward the DBE goal a portion of the total dollar value of a subconsultant agreement with a joint venture eligible under the DBE standards, equal to the percentage of the ownership and control of the DBE partner in the joint venture.

C. The Engineer may count toward the DBE goal expenditures to DBEs who perform a commercially useful function in the completion of services required in this Agreement. A DBE is considered to perform a commercially useful function when the DBE is responsible for the execution of a distinct element of the services specified in the Agreement and the carrying out of those responsibilities by actually performing, managing and supervising the services involved and providing the desired product.

D. A Engineer may count toward the DBE goal its expenditures to DBE firms consisting of fees or commissions charged for providing a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for the performance of this Agreement, provided that the fee or commission is determined by MoDOT's External Civil Rights Division to be reasonable and not excessive as compared with fees customarily allowed for similar services.

E. The Engineer is encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals.

5. <u>Replacement of DBE Subconsultants</u>: The Engineer shall make good faith efforts to replace a DBE Subconsultant, who is unable to perform satisfactorily, with another DBE Subconsultant. Replacement firms must be approved by MoDOT's External Civil Rights Division.

Fig. 136.4.1 Contract

6. <u>Verification of DBE Participation</u>: Prior to final payment by the Local Agency, the Engineer shall file a list with the Local Agency showing the DBEs used and the services performed. The list shall show the actual dollar amount paid to each DBE that is applicable to the percentage participation established in this Agreement. Failure on the part of the Engineer to achieve the DBE participation specified in this Agreement may result in sanctions being imposed on the Commission for noncompliance with 49 C.F.R. Part 26 and/or Section 1101(b) of TEA-21. If the total DBE participation is less than the goal amount stated by the MoDOT's External Civil Rights Division, liquidated damages may be assessed to the Engineer.

Therefore, in order to liquidate such damages, the monetary difference between the amount of the DBE goal dollar amount and the amount actually paid to the DBEs for performing a commercially useful function will be deducted from the Engineer's payments as liquidated damages. If this Agreement is awarded with less than the goal amount stated above by MoDOT's External Civil Rights Division, that lesser amount shall become the goal amount and shall be used to determine liquidated damages. No such deduction will be made when, for reasons beyond the control of the Engineer, the DBE goal amount is not met.

7. Documentation of Good Faith Efforts to Meet the DBE Goal: The Agreement goal established by MoDOT's External Civil Rights Division. The Engineer must document the good faith efforts it made to achieve that DBE goal, if the agreed percentage specified is less than the percentage stated. Good faith efforts to meet this DBE goal amount may include such items as, but are not limited to, the following:

A. Attended a meeting scheduled by the Department to inform DBEs of contracting or consulting opportunities.

B. Advertised in general circulation trade association and socially and economically disadvantaged business directed media concerning DBE subcontracting opportunities.

C. Provided written notices to a reasonable number of specific DBEs that their interest in a subconsultant agreement is solicited in sufficient time to allow the DBEs to participate effectively.

D. Followed up on initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested in subconsulting work for this Agreement.

E. Selected portions of the services to be performed by DBEs in order to increase the likelihood of meeting the DBE goal (including, where appropriate, breaking down subconsultant agreements into economically feasible units to facilitate DBE participation).

F. Provided interested DBEs with adequate information about plans, specifications and requirements of this Agreement.

G. Negotiated in good faith with interested DBEs, and not rejecting DBEs as unqualified without sound reasons, based on a thorough investigation of their capabilities.

H. Made efforts to assist interested DBEs in obtaining any bonding, lines of credit or insurance required by the Commission or by the Engineer.

I. Made effective use of the services of available disadvantaged business organizations, minority contractors' groups, disadvantaged business assistance offices, and other

Fig. 136.4.1 Contract

organizations that provide assistance in the recruitment and placement of DBE firms.

8. <u>Good Faith Efforts to Obtain DBE Participation</u>: If the Engineer's agreed DBE goal amount as specified is less than the established DBE goal given, then the Engineer certifies that the following good faith efforts were taken by Engineer in an attempt to obtain the level of DBE participation set by MoDOT's External Civil Rights.

# Attachment G – Fig. 136.4.15

# **Conflict of Interest Disclosure Form for LPA/Consultants**

Local Federal-aid Transportation Projects

## Firm Name (Consultant): URS Corporation

## Project Owner (LPA): City of Columbia, Missouri

Project Name: Providence Road/Route 163

## Project Number: STP-2101 (506)

As the LPA and/or consultant for the above local federal-aid transportation project, I have:

- 1. Reviewed the conflict of interest information found in Missouri's Local Public Agency Manual (EPG 136.4)
- 2. Reviewed the Conflict of Interest laws, including 23 CFR § 1.33, 49 CFR 18.36.

And, to the best of my knowledge, determined that, for myself, any owner, partner or employee, with my firm or any of my sub-consulting firms providing services for this project, including family members and personal interests of the above persons, there are:

No real or potential conflicts of interest If no conflicts have been identified, complete and sign this form and submit to LPA

Real conflicts of interest or the potential for conflicts of interest

If a real or potential conflict has been identified, describe on an attached sheet the nature of the conflict, and provide a detailed description of Consultant's proposed mitigation measures (if possible). Complete and sign this form and send it, along with all attachments, to the appropriate MoDOT District Representative, along with the executed engineering services contract.

City of Columbia, Missouri

**URS** Corporation

Printed Name: John Glascock

Signature: Juhn Mascorl Date: <u>9/25/13</u>

 $\square$ 

 $\square$ 

Jennifer Obertino, PE Vice-President and Office Manager

Signature: Jenneter Obentur Date: 8-19-13

Source: Public Work

Agenda Item No:



To: <u>City Council</u> From: <u>City Manager and Staff</u> Council Meeting Date: Oct 7, 2013

Re: Professional Engineering Services Contract - Providence Road Improvement Project (Stadium Boulevard to Stewart Road)

## EXECUTIVE SUMMARY:

Staff has prepared for Council consideration a resolution authorizing the City Manager to execute an engineering services contract with URS Corporation for the Providence Road Improvement project. This consultant was selected through a competitive process that met city, state and federal requirements.

### DISCUSSION:

The Providence Road Improvement project includes portions of existing Providence Road/Route 163, from the intersection with Stadium Boulevard/Route 740, northward approximately 1/2-mile to south of Stewart Road. Interested parties (IP) meetings were held on April 24, 2008, April 20, 2010 and March 20, 2013. Public hearings were held on November 19, 2012, April 15, 2013 and June 3, 2013. At the June 3, 2013 public hearing, Council approved an amended version of Option VIII-A (8A).

The scope of services for this engineering contract includes surveying, engineering design and final construction documents necessary to construct the project. MoDOT will need to review and approve all concepts through the various design stages. The preliminary total cost for the project including engineering design, easement acquisition and utility relocation is approximately \$2.1M. Construction is anticipated in 2015.

### FISCAL IMPACT:

The contract with URS Corporation is for a not-to-exceed amount of \$376,300. Eligible funding sources include capital fund balance, 1/4% capital improvement sales tax, and STP funds. Funds in the amount of \$2,302,211 have already been appropriated to the Providence Road improvement project.

### VISION IMPACT:

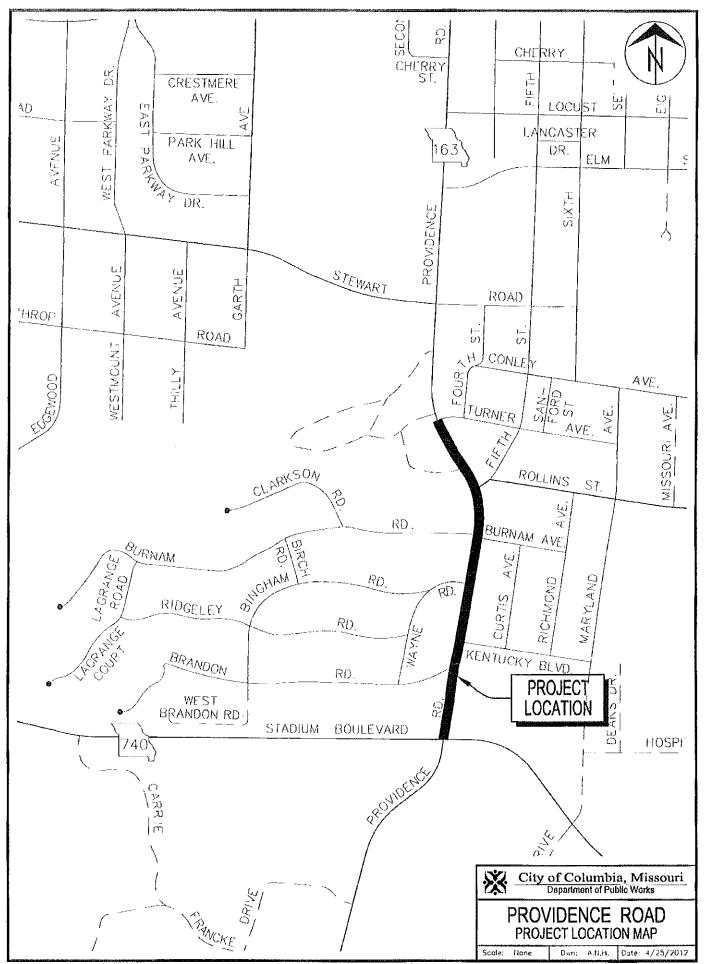
### http://www.gocolumbiamo.com/Council/Meetings/visionimpact.php

Dedicate funds to identify routes and corridors for all modes, preserve rights of way, and improve existing intersections to enhance safety and improve capacity.

### SUGGESTED COUNCIL ACTIONS:

Approve the resolution authorizing the City Manager to execute an engineering services contract with URS Corporation for the Providence Road Improvement project.

FISCAL and VISION NOTES:								
<b>City Fiscal Impact</b> Enter all that apply		Program Impact		Mandates				
City's current net FY cost	\$84,466.00	New Program/ Agency?	No	Federal or State mandated?	No			
Amount of funds already appropriated	\$2,302,211.0( #	Duplicates/Epands an existing program?	No	Vision Implementation impact				
Amount of budget amendment needed	\$0.00	Fiscal Impact on any local political subdivision?	No	Enter all that apply: Refer to Web site				
Estimated 2 year net costs: Resources F		Resources Rec	luired	Vision Impact?	Yes			
One Time	\$376,300.00	Requires add'I FTE Personnel?	No	Primary Vision, Strategy and/or Goal Item #	13.2.2			
Operating/ Ongoing	\$0.00	Requires add'1 facilities?	No	Secondary Vision, Strategy and/or Goal Item #				
		Requires add'l capital equipment?	No	Fiscal year implementation Task #	· · · ·			



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